

## REMARKS

Claims 1-37 are pending in the application and stand rejected as being unpatentable over the references Hollingsworth and the Workflow Management Coalition in view of U.S. Patent Application No. 2002/0055849 by Georgakopoulos. Applicant respectfully submits that at the very least, the cited combination of references does not disclose or suggest various elements of claims 1, 20 and 29, and that such references do not disclose or suggest the claimed inventions as a whole.

For instance, the combination of references does not disclose or suggest, *determining scheduled activities for a process instance using schedule rules that specify conditions under which activities are scheduled for enactment based on workflow relevant data, and computing a recommended order in which the scheduled activities can be enacted based on the activity specifications and a current execution state of the process instance*, as essentially claimed in claims 1, 20 and 29.

More specifically, neither reference discloses the use of “schedule rules” as part of activity specifications, which specify conditions under which activities can be scheduled for enactment based on workflow-relevant data. In other words, “schedule rules” specify the conditions over workflow relevant data, which are to be satisfied for a given activity to be scheduled for enactment. The use of schedule-rules to specify conditions over the workflow relevant data, is in contrast to conventional schemes in which rules for enacting activities are derived from “control flow dependencies” which, in a state-based workflow systems such as in the cited references of Hollingsworth and Georgakopoulos, means that all of the preceding activities have completed and all the guard conditions on the transitions are satisfied.

Moreover, neither Hollingsworth nor Georgakopoulos alone or in combination teaches or suggests determining a *recommended order in which the scheduled activities can be enacted based on the activity specifications and a current execution state of the process instance*. The Examiner continues to rely on Georgakopoulos' teaching of an "optional" activity as being the same or similar to the claimed feature of "determining a recommended order in which scheduled activities can be enacted". It is respectfully submitted that Examiner's reliance on Georgakopoulos in this regard is misplaced.

Georgakopoulos specifically teaches that the process flow P (300) in FIG. 3A is predefined and contemplated at the time that the process workflow model is developed (see, para. [0039]) An option primitive (312) associated with "Activity B" (310) in the predefined process flow P (300) of FIG. 3A is merely a repeatable "creator" primitive that permits the activity (310) (**which is already enabled by the predefined process flow**) to be instantiated zero or more times (see, (see, para. [0039])).

In view of this clear, unambiguous teaching, the Examiner's reliance on "optional activity" is fundamentally flawed on various grounds. In the first instance, the claim language states "*computing a recommended order in which the scheduled activities can be enacted . . .*". To meet the claim language, the Examiner's argument assumes that the process flow P (300) in FIGs. 3A and 3A are "scheduled activities" as contemplated in the claimed inventions, which are determined based on "schedule rules". On this level, the Examiner's argument is undermined by the fact that, as noted above, Georgakopoulos specifically teaches that the process flow P (300) in FIG. 3A is predefined and contemplated at the time that the process workflow model is developed (see, para. [0039]). Thus, the activities A and B in FIGs. 3A and 3B cannot be "scheduled activities" as contemplated by the claimed inventions.

Moreover, there is simply no notion of the workflow engine *recommending an order in which scheduled activities can be enacted*, as contemplated by the claimed inventions. Even assuming, arguendo, the activities A and B in FIGS. 3A and 3B of Georgakopoulos are “scheduled activities” within the meaning of the claim language (which clearly is not true), there is nothing in Georgakopoulos that even remotely teaches recommending an order of in which scheduled activities can be enacted because the order of the activities A and B in the process flow of FIGs. 3A and 3B **is predefined** as clearly taught by Georgakopoulos.

The Examiner continues to blindly rely on the Georgakopoulos’ teaching in paragraph [0014] that the option primitives allow the workflow system to “suggest one or more optional activities at a specific point in the workflow process execution”, without given due consideration to the context of this teaching with regard to the claim language. Even on this level of “vacuum interpretation”, there is a stark difference between a workflow engine “suggesting one or more optional activities at some point in the process flow” and a workflow engine “computing a recommended order in which scheduled activities can be enacted” as claimed. In any event, Georgakopoulos clearly teaches that the “suggestion” of an optional activity is nothing more than “an option primitive that defines an activity that may be instantiated one or more times during execution” (see, claim 2, page 5 of Georgakopoulos). How does this equate to a workflow engine computing a recommended order of scheduled activities?? It is incumbent on the Examiner to provide a clear answer to this question.

In any event, Georgakopoulos does not teach or suggest that the “option primitives” are some mechanism that enables the workflow engine to compute a recommended order of scheduled activities as contemplated by the claimed inventions. In fact, it should be rather obvious to the Examiner that Georgakopoulos’ teaching of a predefined process flow defined at

the time of specification in FIGs. 3A and 3B squarely militates against any notion that the order of Activities A and B in the process flow P (300) (in FIGs. 3A and 3B) is a “recommended order” or scheduled activities that is computed by a workflow engine.

Accordingly, for at least the above reasons, claims 1, 20 and 29 are patentable and non-obvious over the combination of Hollingsworth, Workflow Management Coalition, and Georgakopoulos. Moreover, all pending dependent claims are patentable over the cited combination at least by virtue of their dependence from respective base claims 1, 20 and 29.

Applicants respectfully request favorable reconsideration of the application as now presented. The Examiner is invited to contact the undersigned should he have any questions in this matter.

Respectfully submitted,  
*Donald B. Paschburg*  
Donald B. Paschburg  
Reg. No. 33,753  
Attorney for Applicant

Siemens Corporation  
Intellectual Property Department  
170 Wood Avenue South  
Iselin, New Jersey 08830  
(732) 321-3191